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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/710,406

07/08/2004

Ching-Sheng Yang

4405

44489

7590

01/03/2005

TAIPEI MULTIPOWER ELECTRONICS CO., LTD.
2F-4, NO. 148, SEC. 4, CHUNG HSIAO EAST ROAD
TAIPEI,
TAIWAN

EXAMINER

POKER, JENNIFER A

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 01/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/710,406

Applicant(s)

YANG ET AL.

Examiner

Jennifer A. Poker

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

General Status

1. This is a first action on the merits of application filed on July 8, 2004. Claims 1-9 are pending and are being examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 6,483,411 to Chiang, et al.

Regarding claim 1, Chiang, et al, discloses a transformer comprising:

- (1) a bobbin (302), enclosing a hollow central region (315) and having a receiving hole (315) for the insertion of a core element (304) (abstract; figure 3b); the bobbin further comprising two sides with inlaying (insertion) portions and buckling portions wherein the buckling portions have terminal pins extending therefrom (column 3, lines 26-31);
- (2) a core element (304) inserted into the hollow central region (315) of the bobbin, wherein two ends protrude out of the inlaying (insertion) portions (figure 3A);
- (3) transmission (outer core) elements (306, 308) with holding portions (ends protruding at 90 degree angles) at two sides wherein the outer core is secured at the insertion portion of the receiving hole of the bobbin (figures 3A & 3B).

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Regarding claim 2, Chiang, et al, further discloses that the outer cores (306, 308) are made of a high permeability conductive material of zinc and nickel (column 3, lines 1-3).

Regarding claim 3, Chiang, et al, further discloses that the transmission (outer core) elements (306, 308) are U-shaped, i.e. having holding portions (ends protruding at 90 degree angles) (figures 3A & 3B; column 3, lines 1-3).

Regarding claims 4 and 7, Chiang, et al, further illustrates in figure 3b, that the buckling portions and inlaying/insertion portions at each end of the bobbin have a groove/gap located between the terminal pins.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,483,411 to Chiang, et al, in view of U.S. Patent Number 5,847,518 to Ishiwaki.

Regarding claim 5, Chiang, et al, discloses the claimed invention except for the use of a plurality of bobbins.

Ishiwaki discloses a transformer having a plurality of bobbins; each bobbin having a hollow center for the insertion of a core. Each bobbin includes a plurality of turns of windings. The purpose of this structure is to provide a high voltage transformer of a reduced size and a reduce weight minimizing accidents due to the discharge between the adjacent turns in the coil and between the coils (figure 12; column 2, lines 50-54).

One skilled in the art, at the time the invention was made would have found it obvious to combine the teachings of Chiang, et al, with the teachings of Ishiwaki and utilize several bobbins with receiving holes of cores for the purposes of providing a high voltage transformer of a reduced size and a reduce weight minimizing accidents due to the discharge between the adjacent turns in the coil and between the coils.

Regarding claim 6, Chiang, et al, further illustrates that the transmission/outer core elements (306, 308) are positioned independently (figure 3B).

6. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,483,411 to Chiang, et al, in view of U.S. Patent Number 6,734,777 to Yeh, et al.

Regarding claim 8, Chiang, et al, discloses the claimed invention except for the use of a lid that covers a top of the bobbin.

Yeh, et al, discloses a transformer comprising bobbins and hollow portions for the receiving of a core. The transformer further comprises an insulating shell 300 comprised of an upper insulating cover 310 and a lower cover 320. The upper insulating cover 310 encloses the top surface of the bobbin 100 and the lower insulating cover 320 encloses the bottom surface of the bobbin 100. As can see in figure 2a, the bottom cover has two LONG bar shaped receiving portions located at sides thereof. The top portion would inherently have portions to be inserted into those portions in order to securely attach the top and bottom portions together to better insulate the transformer (column 3, lines 15-20).

One skilled in the art, at the time the invention was made would have found it obvious to combine the teachings of Chiang, et al, with the teachings of Yeh, et al, and incorporate an insulating cover, which would securely attach to another section for the purposes of insulating the transformer.

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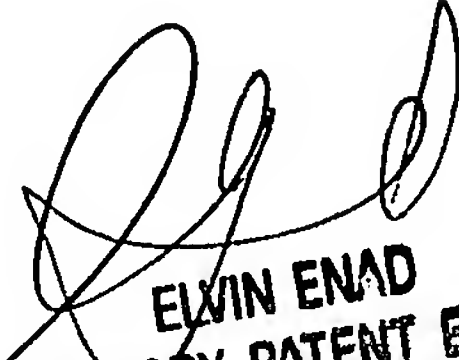
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Poker whose telephone number is 571-272-1997. The examiner can normally be reached on 4:30-3:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jap
December 22, 2004


ELVIN ENAD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800
DEC 23, 2004